

The commission adopts amendments to §117.540, concerning Phased Reasonably Available Control Technology (RACT), and §117.570, concerning Trading, in Subchapter D (Administrative Provisions), and revisions to the State Implementation Plan. The amendments are adopted without changes to the proposed text as published in the June 10, 1997 issue of the *Texas Register* (22 TexReg 5653) and will not be republished.

EXPLANATION OF ADOPTED RULES

Section 117.540 and §117.570 are amended to make the rule requirements consistent with new §101.29 of this title, regarding Emissions Banking and Trading. Existing §101.29 is being repealed, and new §101.29 is being added, concurrent with these amendments to Chapter 117. The amendments retain provisions that allow emission reduction credits (ERCs) and mobile emission reduction credits (MERCs) to be used for purposes of nonattainment offsetting. The amendments expand uses of ERCs to include compliance with RACT requirements and to allow for the creation and use of discrete emission reduction credits (DERCs) and mobile discrete emission reduction credits (MDERCs). Under the amendments, sources may meet Chapter 117 nitrogen oxides (NO_x) control requirements by applying ERCs or DERCs. Please refer to the §101.29 adoption for a more complete description of these types of credits, and the requirements for their generation and use. Also, revisions to Chapter 115 of this title, concerning Control of Air Pollution from Volatile Organic Compounds (VOC), are adopted concurrent with this rulemaking to provide more flexible trading options for sources of VOCs.

Section 117.540 allows affected sources to petition the agency for additional time to comply with Chapter 117 requirements. The rule was developed in response to companies' concerns that in spite of good faith efforts to achieve compliance by the required date, delays in delivery, construction, and installation of control equipment could be encountered in some cases. As originally adopted and previously amended, §117.540 requires documentation of the specific reasons for any requested compliance extension. This amendment requires that reduction credits, if reasonably available, must be obtained by sources seeking extensions past the Chapter 117 compliance date. Revised §117.540 requires that phased RACT petitions contain detailed documentation that credits are not reasonably available. In addition, §117.540 (b) and (c) are deleted, since the uses of MERCs for Chapter 117 compliance as outlined in these subsections are now addressed in new §101.29(d).

Existing §117.570 allows trading as an alternative method for sources of NO_x to comply with the control requirements of Chapter 117. Revisions to §117.570 in this adoption update rule references to include MERCs, DERCs, and MDERCs, clarify rule requirements, and eliminate redundant rule provisions now contained in new §101.29.

New §117.570(c)(4) specifies requirements for credit generation by units participating in a source cap in accordance with §117.223 (Source Cap). Under §117.223, heat input is calculated by taking the actual historical average of the daily heat input for each participating unit during a specified 24 consecutive month period, plus one standard deviation of the average daily heat input for that period. This provision for adding one standard deviation affords companies a compliance margin that accounts

for normal fluctuations in the actual daily heat input. A source cap allowable emission rate based on historical heat input, without including this margin, could result in exceedances of the source cap under normal operating conditions unless either a compliance margin was provided, or the source lowered its actual emission rate to compensate for these fluctuations. In order to assure that credits generated under a source cap represent actual emission reductions, new §117.570(c)(4) requires that one standard deviation may not be included in the calculation of reduction credits generated. In addition, the source cap allowable must be reduced by the amount of the creditable reductions claimed for the unit in question.

TAKINGS IMPACT ASSESSMENT

The commission has prepared a Takings Impact Assessment for these rules pursuant to Texas Government Code Annotated, §2007.043. The following is a summary of that assessment. The specific purpose of the adoption is to provide an alternative flexible, cost-effective method of complying with the NO_x control requirements of Chapter 117. Promulgation and enforcement of these rule amendments will not affect private real property.

COASTAL MANAGEMENT PLAN

The commission has determined that this rulemaking action is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et. seq.), the rules of the Coastal Coordination Council (31 TAC Chapters 501-506), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency

with the Texas Coastal Management Program. As required by 31 TAC §505.11(b)(2) and §505.22(a), and 30 TAC §281.45(a)(3), relating to actions and rules subject to the CMP, agency rules governing air pollutant emissions must be consistent with applicable CMP goals and policies. The commission has reviewed this rulemaking action for consistency, and has determined that it is consistent with the applicable CMP goals and policies because the action provides a flexible, cost-effective alternative approach to rule compliance by allowing emissions banking and trading. This rulemaking action will not authorize any new sources of air emissions.

PUBLIC HEARING AND COMMENTERS

A public hearing was held in Austin on July 8, 1997. Nine organizations and one individual submitted comments during the public comment period, which closed on July 10, 1997. Baker & Botts, Exxon Chemical Company, Houston Lighting & Power, and the Texas Chemical Council supported the proposal. The United States Environmental Protection Agency generally supported the proposal, but submitted comments recommending various changes. Environmental Defense Fund, Sierra Club Lone Star Chapter, Texas Center for Policy Studies, and an individual generally opposed the proposal. One comment was received that specifically addressed provisions of Chapter 117. Evaluation of testimony regarding general banking and trading issues can be found in the Chapter 101 adoption, published concurrently with this adoption.

An individual questioned the agency's allowance of additional time to comply with Chapter 117, and requested a definition of "not reasonably available" and "impracticable."

Section 117.540, relating to Phased RACT, requires that sources requesting a time extension to comply with Chapter 117 must demonstrate that credits are not reasonably available. Although the term "reasonably available" is not defined, the burden of proof rests with the company requesting the phased RACT extension. The company must supply full documentation of the sale price requested by the buyer and offered by the seller, as well as the reason why credits, if available, were not purchased. "Impracticable" considerations will be evaluated for technical merit using engineering judgment. Again, the burden of proof rests with the company requesting the RACT extension. The rule provides the opportunity for environmental benefit in conjunction with time extensions, which the staff believes is an improvement over the current rule requirements.

STATUTORY AUTHORITY

The amendments are adopted under the Texas Health and Safety Code (Vernon 1992); the Texas Clean Air Act (TCAA), §382.017, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and TCAA §382.012, which requires the commission to develop plans for protection of the state's air.

SUBCHAPTER D : ADMINISTRATIVE PROVISIONS

§117.540. Phased Reasonably Available Control Technology (RACT).

The owner or operator affected by the provisions of this chapter (relating to Control of Air Pollution from Nitrogen Compounds) who determines that compliance by May 31, 1999 is not practicable may submit a petition for phased RACT. The process for submitting a petition and receiving approval shall be based on the following:

(1) (No change.)

(2) The owner or operator of the affected unit or units shall submit information in the petition to the Texas Natural Resource Conservation Commission (commission) and a copy to the United States Environmental Protection Agency (EPA) Regional Office in Dallas which will demonstrate all of the following:

(A) emission reduction credits (ERCs) or discrete emission reduction credits (DERCs), in accordance with §101.29 of this title (relating to Emission Credit Banking and Trading), are not reasonably available in an amount equal to the quantity of emission reductions required under this chapter. If ERCs or DERCs are reasonably available, they shall be applied to meet the emission

reductions required under this chapter, in accordance with §117.570 of this title (relating to Trading) and §101.29 of this title.

(B) compliance by May 31, 1999 is impracticable due to the unavailability of nitrogen oxides (NO_x) abatement equipment, engineering services, or construction labor; system unreliability; manufacturing unreliability; equipment unreliability; or other technological and economic factors as the commission determines are appropriate;

(C) there is a proposed stage-by-stage program for compliance and clearly specified compliance milestones for each unit;

(D) there is a commitment to implement the portion of the phased RACT petition that can be implemented by May 31, 1999; and

(E) the final compliance date specified in the petition shall be as soon as practicable, but in no case later than August 31, 2000, except as approved by the executive director.

(3) (No change.)

(4) All petitions for phased RACT shall include a list of the company names, addresses, and telephone numbers of persons who own or control ERCs or DERCs, and who have been

contacted in efforts to obtain the ERCs or DERCs for purposes of meeting the emission reductions required under this chapter. For each person or company contacted, the list shall contain a description of the information obtained, including but not limited to the date of contact, availability of the ERCs or DERCs, sale price requested by the owner or controller of the ERCs or DERCs, sale price offered by the prospective buyer of the ERCs or DERCs, and an explanation of the reasons why the ERCs or DERCs, if available, were not purchased for purposes of meeting the emission reductions required under this chapter.

(5) All petitions for phased RACT shall include copies of legally binding contracts with the primary vendors for each project, signed by an authorized official of the company, showing a detailed design or installation schedule for the required services or equipment to be provided by that vendor, with a completion date no later than August 31, 2000, except as approved by the executive director. Any commercially sensitive financial information or trade secrets should be excised from the contracts.

(6) Within 30 days of receiving a petition for phased RACT, the executive director shall inform the applicant in writing that the petition is complete or that additional information is required. If the petition is deficient, the notification shall state any additional information required. The requested information correcting the deficiency shall be received by the executive director within 30 days of the date of the letter notifying the applicant of the deficiency.

(7) The executive director shall approve or deny the petition within 90 days of receiving an administratively complete phased RACT petition. The executive director shall approve a petition for phased RACT if the executive director determines that compliance is not practicable by May 31, 1999, because of either the unavailability of nitrogen oxides abatement equipment, engineering services, or construction labor; system unreliability; manufacturing unreliability; equipment unreliability; or other technological and economic factors as the executive director determines are appropriate.

(8) Any person affected by the executive director's decision to deny a petition for phased RACT or to deny a revision to an approved phased RACT petition may file a motion for reconsideration. Notwithstanding the applicability provisions of §50.31(c)(7) of this title (relating to Purpose and Applicability), the requirements of §50.39 of this title (relating to Motion for Reconsideration) apply. However, only a person affected may file a motion for reconsideration. Approved petitions for phased RACT may be revised by the executive director upon a showing of just cause by the applicant.

(9) Approval of a phased RACT schedule by the commission does not waive any applicable federal requirements or eliminate the need for approval by EPA.

(10) The holder of an approved phased RACT determination shall comply with each specified compliance milestone and each date for compliance provided in the approved petition, as well as any other condition established in the approval.

§117.570. Trading.

(a) An owner or operator may reduce the amount of emission reductions required by §117.105 or §117.205 of this title (relating to Emission Specifications), §117.107 of this title (relating to Alternative System-Wide Emission Specifications), §117.207 of this title (relating to Alternative Plant-Wide Emission Specifications), or §117.223 of this title (relating to Source Cap) by obtaining an emission reduction credit (ERC), mobile emission reduction credit (MERC), discrete emission reduction credit (DERC), or mobile discrete emission reduction credit (MDERC) established in accordance with this section and §101.29 of this title (relating to Emission Credit Banking and Trading). Any ERCs or DERCs for nitrogen oxides (NO_x) generated under the provisions of §101.29 of this title used for the purposes of this chapter become subject to the limitations and provisions of this section. For the purposes of this section, the term "RC" refers to an ERC, MERC, DERC, or MDERC whichever is applicable.

(b) Reduction credits (RCs) shall be generated as follows.

(1) For sources not subject to the emission specifications of §117.105 or §117.205 of this title, creditable RCs used to meet compliance with those sections shall be established in accordance with the following requirements:

(A) The source shall use emissions test data to establish the actual emissions baseline in accordance with the testing requirements of §117.209(b) of this title (relating to Initial Control Plan Procedures), or §117.111 or §117.211 of this title (relating to Initial Demonstration of Compliance), as applicable. The actual emissions baseline is defined as the actual annual emissions, in tons per year, from a source determined by use of data representative of actual operations in 1990 or later, assuming full compliance with all applicable state and federal rules and regulations.

(B) If the source creating the RC has been shut down or irreversibly changed, the source shall use the best available data and good engineering practice to establish the actual emissions baseline.

(2) For sources subject to the emission specifications of §117.105 or §117.205 of this title, creditable RCs shall be calculated using the following equations:

$$\text{ERCs (tons per year)} = \sum_{j=1}^N \left[H_j \times (R_{Aj} - R_{Bj}) \times \frac{365}{2000} \right]$$

or

$$\text{DERCs (tons)} = \sum_{j=1}^N \left[H_j \times (R_{Aj} - R_{Bj}) \times \frac{d}{2000} \right]$$

Where:

- j = each emission unit subject to this section generating RCs
- N = the total number of emission units subject to this section generating RCs
- H_j = actual daily heat input, in million British thermal units (MMBtu) per day, as calculated according to §117.223(b)(1) of this title
- R_{Aj} = the lowest of any applicable federally enforceable emission limitation, the reasonably available control technology (RACT) limit of §117.105 or §117.205(b)-(d) of this title, or the actual emission rate as of June 9, 1993, in pound (lb)/MMBtu, that apply to emission unit j in the absence of trading. For units that have been shut down prior to June 9, 1993, the actual emission rate shall be considered to be the average annual emission rate occurring over the period used to define the unit's baseline heat input period in §117.223(g)(3) of this title.
- R_{Bj} = the enforceable emission rate, in lb/MMBtu, for unit j established in the registration under subsection (e) of this section.
- d = the number of days in the generation period

(3) RCs from shutdown units may be generated only by units participating in a source cap in accordance with §117.223 of this title.

(4) For units participating in a source cap in accordance with §117.223 of this title, creditable RCs may be generated only under the following conditions:

(A) The source cap allowable must be reduced by the amount of the creditable reductions claimed for the unit or units, and

(B) the actual historical average of the daily heat input for the unit or units may not include one standard deviation of the actual average daily heat input for the period for which creditable reductions are claimed.

(c) Reduction credits shall be used as follows.

(1) An owner or operator complying with §117.223 of this title may reduce the amount of emission reductions otherwise required by complying with the following equations instead of the equations in §117.223(b)(1) and (2) of this title.

ERCs or
 MERCS:

$$\text{New 30-day rolling average emission limit (lb/day)} = \sum_{i=1}^N \left[(H_i \times R_i) + \left(RC_i \times \frac{2000}{365} \right) \right]$$

or

DERCs or
 MDERCS:

$$\text{New 30-day rolling average emission limit (lb/day)} = \sum_{i=1}^N \left[(H_i \times R_i) + \left(\frac{RC_i \times 2000}{d} \right) \right]$$

Where:

R_i , in lb/MMBtu, is defined as in §117.223(b)(1) of this title

I = each emission unit in the source cap

N = the total number of emission units in the source cap

- H_i = actual daily heat input, in MMBtu per day, as calculated according to §117.223(b)(1) of this title
- RC_i = RC used for each unit, in tons per year (for ERCs or MERCs) or tons (for DERCs), generated in accordance with subsection (b) of this section. If RC_i is from a unit not subject to the emission specifications of §117.105 or §117.205 of this title, this term becomes RC_i/F , where F is the offset ratio for the ozone nonattainment area where the unit is located (e.g. 1.2 for Beaumont/Port Arthur and 1.3 for Houston/Galveston).
- d = the number of days in the use period

and

ERCs or
MERCs: **New maximum daily emission limit (lb/day)** =
$$\sum_{i=1}^N \left[(H_{Mi} \times R_i) + \left(RC_i \times \frac{2000}{365} \right) \right]$$

or

DERCs or
MDERCs: **New maximum daily emission limit (lb/day)** =
$$\sum_{i=1}^N \left[(H_{Mi} \times R_i) + \left(\frac{RC_i \times 2000}{d} \right) \right]$$

Where:

I and N are defined as in the first equation in this paragraph

R_i , in lb/MMBtu, is defined as in §117.223(b)(1) of this title

H_{Mi} = the maximum daily heat input, in MMBtu/day, as defined in §117.223(b)(2) of this title.

d = the number of days in the use period

(2) An owner or operator complying with §117.105, §117.107, §117.205, or §117.207 of this title may reduce the amount of emission reduction otherwise required by those sections for a unit or units at a major source by complying with individual unit emission limits calculated from the following equation:

$$\begin{array}{l} \text{ERCs or} \\ \text{MERCs:} \end{array} \quad \begin{array}{l} \text{New emission limit} \\ \text{for unit } i \text{ (lb/MMBtu)} \end{array} = R_{Ai} + \left(\frac{RC_i}{H_{Mi}} \times \frac{2000}{365} \right)$$

or

$$\begin{array}{l} \text{DERCs or} \\ \text{MDERCs:} \end{array} \quad \begin{array}{l} \text{New emission limit} \\ \text{for unit } i \text{ (lb/MMBtu)} \end{array} = R_{Ai} + \left(\frac{RC_i}{H_{Mi}} \times \frac{2000}{d} \right)$$

Where:

- i = each emission unit subject to this section
- N = the total number of emission units subject to this section
- R_{Ai} = the lowest of any applicable federally enforceable emission limitation, the RACT limit of §117.105 or §117.205(b)-(d) of this title, or the actual emission rate as of June 9, 1993, in lb/MMBtu, that apply to emission unit I in the absence of trading. For units that have been shut down prior to June 9, 1993, the actual emission rate shall be considered to be the average annual emission rate occurring over the period used to define the unit's baseline heat input period in §117.223(g)(3) of this title.
- d = the number of days in the use period

and

H_{Mi} and RC_i are defined as in paragraph (1) of this subsection.

The appropriate compliance averaging period specified in §117.105, §117.107, §117.205, or §117.207 of this title shall be assigned to unit i using a RC in accordance with the provisions of this paragraph.

(3) RCs from shutdown units may be used only by units participating in a source cap in accordance with §117.223 of this title.

(d) Any lower NO_x emission specification established by rule or permit for the unit or units generating an ERC shall require the user of the ERC to obtain an approved new reduction credit or otherwise reduce emissions prior to the effective date of such rule or permit change. For units using an ERC in accordance with this section which are subject to new, more stringent rule or permit limitations, the owner or operator using the ERC shall submit a revised final control plan to the executive director in accordance with §117.117 or §117.217 of this title (relating to Revision of Final Control Plan) to revise the basis for compliance with the emission specifications of this chapter. The owner or operator using the ERC shall submit the revised final control plan as soon as practicable, but no later than 90 days prior to the effective date of the new, more stringent rule or permit limitations. In addition, the owner or operator of a unit generating the ERC shall submit a revised registration application to the executive director, in accordance with subsection (e)(1) of this section, within 90 days prior to the effective date of any new, more stringent rule or permit limitations affecting that unit. If a more

stringent NO_x emission specification is established by rule or permit for the unit or units generating the ERC, the value of the ERC shall be recalculated as follows:

$$\text{ERCs:} \quad \text{Recalculated ERC (tons per year)} = \sum_{j=1}^N \left[H_j \times (R_{Bj} - R_{Aj\text{-new}}) \times \frac{365}{2000} \right]$$

Where:

j , N , H_j and R_{Bj} are defined as in subsection (b)(2) of this section

$R_{aj\text{-new}}$ = the new NO_x emission specification for unit j , in lb/MMBtu

If the recalculated ERC is of zero or negative value, the ERC is determined to be of zero value.

(e) The RC program established by this section shall be administered as follows:

(1) For emission units subject to the emission specifications of this chapter, which generate ERCs, MERCs, DERCs, or MDERCs and for which the owner or operator elects to comply with the individual emission specifications of §§117.105, 117.107, 117.205, or 117.207 of this title, the enforceable emission limit R_{Bj} shall be calculated using the maximum rated capacity.

(2) For emission units subject to the emission specifications of this chapter, which generate ERCs, MERCs, DERCs, or MDERCs, and for which the owner or operator elects to achieve compliance using §117.223 of this title, the enforceable emission limit R_{Bj} shall be substituted for R_j in the source cap allowable mass emission rate equations of §117.223(b)(1) and (2) of this title, and those allowable rates shall be the enforceable limits for those sources.

The agency hereby certifies that the adoption has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on November 19, 1997.